The Dynamics of Migration, Health and Livelihoods: INDEPTH Network perspectives

Mark A. Collinson^{1, 2, 3, 4, 5}, Kubaje Adazu^{5,6,7}, Michael J. White⁵, Sally E. Findley⁸, INDEPTH Network Working Group in Migration and Urbanization^{2, 9}.

¹ MRC/ Wits University Rural Public Health and Health Transitions Research Unit, School of Public Health, University of the Witwatersrand, South Africa

² INDEPTH Network, Ghana

³ Centre for Global Health Research, Umeå University, Sweden

⁴ Institute for Behavioral Studies, Colorado University, USA

⁵ Population Studies and Training Center, Brown University, USA

⁶ Kenya Medical Research Institite, Kenya

⁷Center for Disease Control and prevention

⁸ Mailman School of Public Health, Columbia University, USA

⁹ Authors are: Kubaje Adazu, Nurul Alam, Pedro Alonso, John Aponte, Donatien Beguy, Philippe Bocquier, Nguyen T. K. Chuc, Samuel J. Clark, Mark A. Collinson, Daniel Feiken, Sally E. Findley, Annette A.M. Gerritsen, Philip Guest, Kathleen Kahn, Rose Kiriinya, Adama Konseiga, Kayla Laserson, Leonildo Matsinhe, Cheikh Mbacké, Kanyiva Muindi, Ariel Nhacolo, Delino Nhalungo, David Obor, Peter Ofware, Ben Onyango, Ho D. Phuc, Sureeporn Punpuing, Charfudin Sacoor, Laurence Slutsker, Peter K. Streatfield, Nguyen X. Thanh, Stephen M. Tollman, John Vulule, Michael J. White, Yazoumé Yé and Eliya Zulu

Abstract

This paper draws from the Ashgate volume prepared by the Migration and Urbanisation working group of the INDEPTH Network. Migration plays a key role in the shaping of family livelihoods and well-being. Viewing these dynamics with a temporal perspective sheds new light on how families and households are impacted. The book starts with a conceptual and methodological framework to inform the epidemiological studies that are clustered into two themes, household livelihoods and individual health outcomes. The series of peer-reviewed case studies come from low-resource communities in sub-Saharan Africa, South and South East Asia. The findings document the potential negative consequences of migration for the health of migrants and overall health of sending communities. These findings contrast the beneficial impacts of migration as a livelihood strategy. They also exemplify the fact that the impacts of migration can go either way, they can be positive or negative for sending and/or receiving communities depending on the issues at hand and the type of migration under consideration.

Context and literature

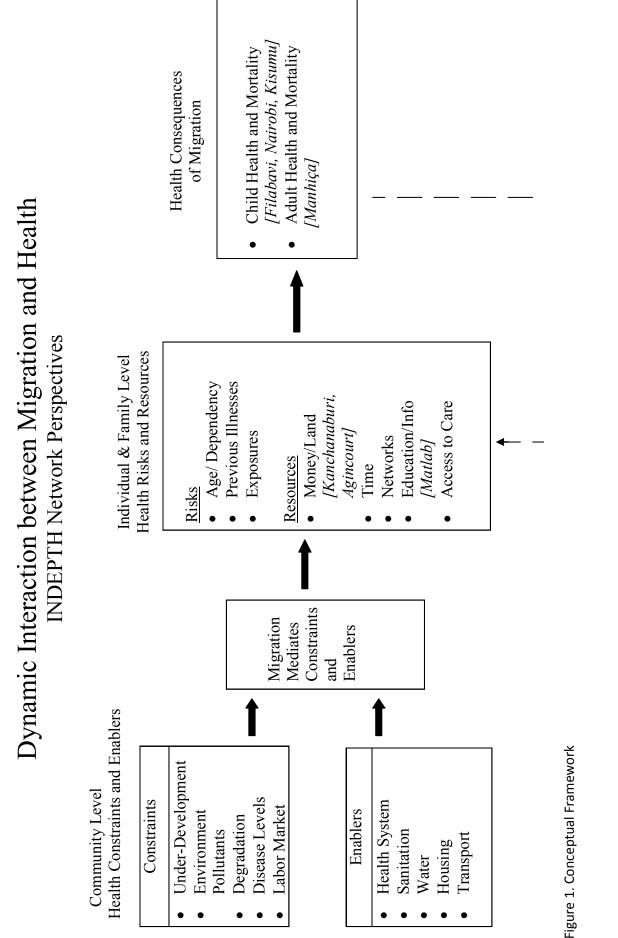
Internal migration is increasingly acknowledged as a force transforming societies in developing countries. Communities, families, households and individuals change with internal migration. Health implications are often hidden or unexpected. Data is minimal for examining more than snapshots of the relationships between migration, livelihoods and health, hence longitudinal data are needed to examine the dynamics of these situations. Health and Demographic Surveillance Systems (HDSS) of the INDEPTH Network provide an opportunity for a comparative analysis.

Theoretical constructs are needed from migration literature to interpret the results. Selection is an important concept whereby migrants who leave a community are not a random sample, but are selected on characteristics such as age and sex, level of education and health. At a household level selection by socioeconomic position or the extent of prior migration predicts the likelihood of sending a migrant. Adaptation is another important concept whereby migrants exposed to a new environment adjust their behaviours and outlooks by absorbing aspects of the new environment. Thirdly, disruption is important in explaining some impacts of migration because bonds are attenuated and made less effective at providing resources, such as the child care of an attentive mother, or spousal sexual and emotional connection, even while the flow of financial support may improve through remittances.

A conceptual framework given below (figure 1) is a multilevel analysis of migration and health, with dynamic variables at the community, household and individual levels. On the left side of the diagramme, boxes represent the community level factors which constrain or enable health in this population. These are the structural features that shape the everyday options for households and individuals. Examples of constraints include 'under-development', levels of disease, or a limited labour market. Examples of health enablers at a community level include health systems, housing quality, cultural norms, education levels, health and prior migration. Moving rightward the next box represents migration which mediates the constraints and enablers listed above. Migrants are selected for age, health and education, and these factors are linked to socioeconomic and health outcomes.

There are a series of health risks and resources for household members at any given time and these can be changed by migration. Examples of health risks are exposure to contagion; environmental hazards; or familial disruption. Examples of household socio-economic risks include retrenchment or death of a bread-winner. Resources for health include assets and income that enable household members to eat well, go to school, or reach a clinic if they are sick. A feedback loop is included because health or socioeconomic status influences the risks and resources available for households, which can have further impacts on health.

Participating HDSS sites tackled research questions at different parts of this conceptual framework.



m

Summary of the introductory chapters (chapters 1-4)

The first four chapters are introductory, overview chapters. Chapter one introduces the topic and explains what we can hope to gain from the surveillance approach to tracking migration (White 2009). Secondly, a methods chapter provides a detailed reflection on the HDSS methods and how these pertain to the study (Adazu 2009). The second chapter also includes a comparative table of migration definitions used in the different sites. The third chapter presents the community contexts, an overview of the study settings and explains how the characteristics of a place help to shape the outcomes of migration (Findley 2009). Table 1 is an example of the comparative contexts portrayed in the chapter. Here we see how impoverished these communities, ranging from Kanchanaburi in Thailand ranked 81st in the world Human Development Index, to Manhiça in Mozambique, ranked 175th. Sites are poor by national standards, e.g. Matlab in Bangladesh has 58% of it's population living in poverty while the national average is 37%. Adult literacy and school enrolments are also low, although a range occurs across the sites.

	Nation,			Poverty		Adult		School	
	2006					Literacy		Enrollment	
Sites	Rank	HDI	GDP	National	Site	National	Site	National	Site
			(PPP\$)						
Fila Bavi	114	0.718	2363	0.13	0.56	0.9	0.99	0.62	0.33
Matlab	147	0.524	1155	0.37	0.58	0.53	0.45	0.52	0.94
Agincourt	125	0.67	9087	0.23	0.43	0.88	0.73	0.77	0.68
Kanchanaburi	81	0.786	7613	0.09	0.17	0.94	NA	0.78	0.05
Kisumu	144	0.532	1436	0.31	0.82	0.74	0.51	0.6	0.97
Manhiça	175	0.366	739	0.48	NA	0.44	0.47	0.55	NA
Nairobi	144	0.532	1436	0.31	0.59	0.74	0.6	0.6	0.48

Table 1. Comparison of the contexts in participating HDSS sites.

To see who actually migrated, chapter four shows the comparative age-sex migration profiles (Collinson 2009). We compare age-sex migration profiles from three sites in Asia and four in Africa (figures 2 - 5). Despite the diversity of contexts (rural and urban, African and Asian) represented in the data and some variation in the threshold of time used to classify migration, there is a relatively regular age structure to migration in these INDEPTH sites. The modal group is young adults, sometimes accompanied by children. Labour migration is a key component of these migration profiles, also children accompanying migrant parents and to a lesser extent marriage or marriage dissolution or households moving to access better services.

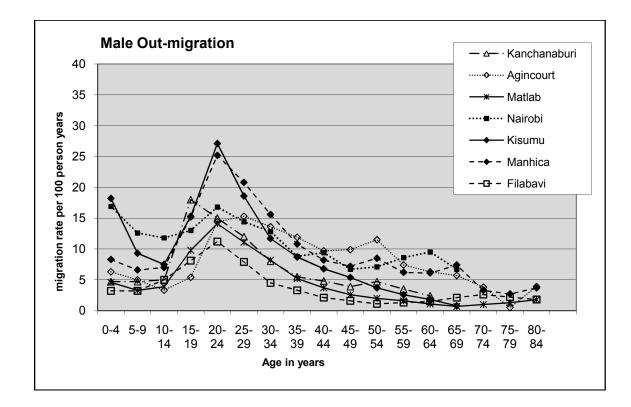
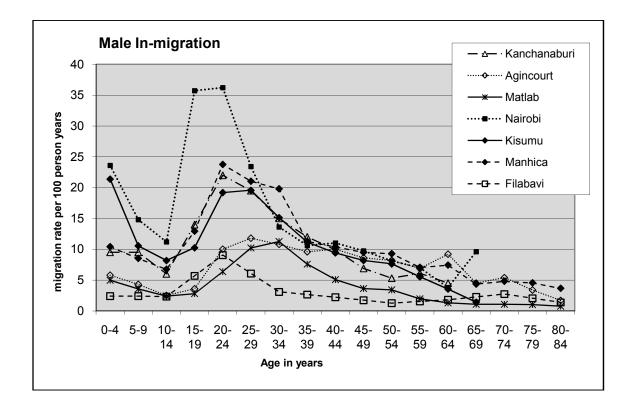


Figure 2. Age sex profiles of male out-migration in seven HDSS sites



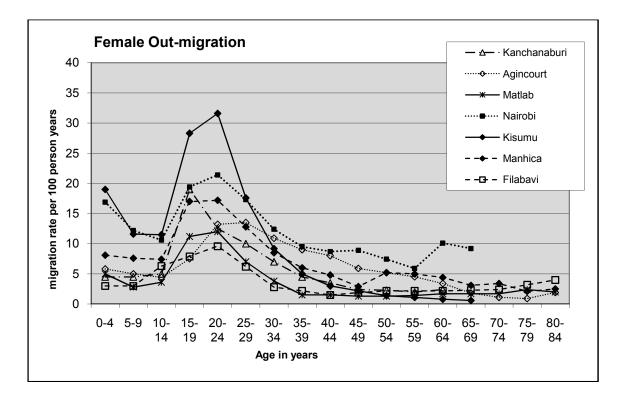


Figure 4. Age sex profiles of female out-migration in seven HDSS sites

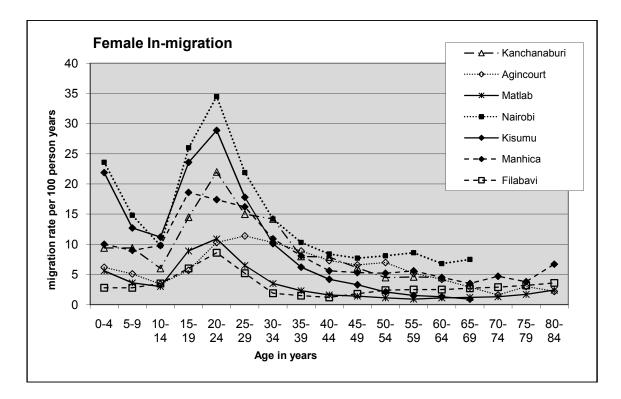


Figure 5. Age sex profiles of female in-migration in seven HDSS sites

The book then proceeds to the site chapters grouped into the two themes where evidence is presented from seven sites. The first theme is migration and livelihoods, containing chapters from two Asian sites (Kanchanaburi and Matlab) and one African site (Agincourt); and the second theme is migration and health, with three African sites (Kisumu, Nairobi and Manhiça) and one Asian site (Filabavi). The settings represent six countries, namely Thailand, Bangladesh, South Africa, Kenya, Mozambique and Vietnam.

Summary of migration and livelihoods chapters (chapters 5-7)

We examine the impact of migration on livelihoods. Migration has long been viewed as a major element of household economies, as elaborated in the New Economics of Labour Migration theory (Stark O and Yitzhaki 1988; Taylor 1999) and in the sustainable livelihoods approach (Rakodi 2002).

The Kanchanaburi chapter (5) from Thailand examines rural households' strategies of trading off migration against the needs of intensified agriculture in rural Thailand (Punpuing and Guest 2009). Households with more land are more likely to send a migrant. Households with out-migrants face constraints in the agriculture activities immediately after the out-migration of a household member, however, households soon adjust to these constraints, drawing on existing household resources to substitute for the labour lost through out-migration.

The Agincourt chapter (6) in rural South Africa shows that short-term female migrants provide vital support to their families of origin (Collinson, Gerritsen et al. 2009). Migrants send money, clothes and food. Remittances are sent by a larger proportion of employed female migrants compared to employed male migrants although the amounts are smaller. Thus, female migrants are vital contributors to the upkeep of the poorest households.

The Matlab chapter (7) in rural Bangladesh shows that households with international male migrants have better educational outcomes for their children remaining at home compared to households without migrants (Alam and Streatfield 2009).

Chapters 5 to 7 provide empirical support for migration as a key livelihoods strategy. They show that migration contributes to improved living conditions and social resilience at the place of origin, which is defined as the ability of communities to absorb external shocks and stresses without significant upheaval (Adger 2006). There are specific sections of the population that are more likely to migrate. Better-off households are more likely to realise the benefits of migration and over time and this produces unequal distribution of resources in the population.

Summary of migration and health chapters (chapters 8-11)

The second set of chapters (8–11) provides a perspective into the intricate links between migration, health and the survival of family members. Three chapters focus on the implications of migration for children under age five who represent the most vulnerable fraction of the population and therefore are more prone to negative consequences of migration, whether they move with or without their parents or are left behind.

The Nairobi Urban chapter (8) from Kenya examines in-migration of women and child mortality (Konseiga, Zulu et al. 2009). The chapter shows that children born in Nairobi's urban slums to non-migrant mothers have significantly higher survival chances than those born to in-migrant mothers, regardless of their origin

The Kisumu chapter (9) from Kenya examines in-migration of children and their subsequent risk of mortality (Adazu, Feiken et al. 2009). The study shows that migrant children moving from Kenyan urban areas to rural Nyanza enjoy a clear survival advantage compared to both non-migrant and migrant children from other rural areas.

The fact that these findings come from an urban and rural site in the same country epitomizes the complexity of the relationship between migration and child survival. This relationship depends on a host of factors including exposure to new threats, migrant selectivity and differential health endowments between migrants and non-migrants.

The Filabavi chapter (10) from Vietnam examines out-migration and child morbidity (Phuc, Thanh et al. 2009). The data point to the importance of maternal care for these children by revealing a higher incidence of illness among left-behind children compared to children with non-migrant mothers. No such negative impact is seen by the out-migration of the children's fathers, underscoring the importance of the mother's role in providing health care to young children.

The Manhiça chapter (11) from rural Mozambique examines in-migration and adult mortality (Nhacolo, Nhalungo et al. 2009). The chapter examines the changing dynamics of mortality between returning migrants and non-migrants in an era of HIV/AIDS. In the past, returning migrants were positively selected for health and economic position. From 1999, there is a reversal of the survival advantage of return migrants with an increasing phenomenon of migrants returning home to die. This findings is also documented in rural South Africa (Clark, Collinson et al. 2007). The influx of sick and dying migrants is shifting the burden of disease in affected areas and placing heavy stress on local health care systems.

Epilogue

Chapter 12 reflects on the implications of the above findings (Mbacké 2009). The chapters demonstrate that HDSS provide a unique opportunity to scrutinize the complex social phenomenon of migration. Migration changes the composition of the target population in predictable ways.

Given the intensity of population movements recorded in the different sites it is important that policy maker, program designers and implementers understand and take into account migration in their efforts. This can include being prepared to implement activities in both the origin and destination communities, before and after moving.

Better off households are sometimes more likely to reap the benefits of migration and this can contribute to increasing inequalities and this selectivity could be incorporated into poverty-reduction programs by enhancing outreach to those households with no or few migrants. Finally, there can be access issues for in-migrants, particularly those who are disadvantaged and not fully integrated in local households and communities.

Conclusion

The findings in these chapters document the potential negative consequences of migration for the health of migrants and overall health of sending communities. This contrasts the beneficial impacts of migration unearthed by the chapters dealing with livelihoods. They also exemplify the fact that the impacts of migration can go either way, they can be positive or negative for sending and/or receiving communities depending on the issues at hand and the type of migration under consideration.

Acknowledgements

The authors are extremely grateful to the Wits Mellon Migration Node and the INDEPTH Secretariat for supporting this research work from 2004 to 2009, as well as the Health and Demographic Surveillance Sites that participated in the initiative, whether or not they made it into the final collection.

References

- Adazu, K. (2009). Health and Demographic Surveillance Migration Methodology and Data: A Promise for Cross-Site Comparative analyses <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH Network perspectives</u> M. A. Collinson, Adazu, K., White, M.J., Findley, S.E. Aldershot, UK, Ashgate.
- Adazu, K., D. Feiken, P. Ofware, B. Onyango, D. Obor, R. Kiriinya, L. Slutsker, J. Vulule and K. Laserson (2009). Child Migration and Mortality in rural Nyanza Province: Evidence from the Kisumu Health and Demographic Surveillance System (KHDSS) in Western Kenya. <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH</u> <u>Network perspectives</u> M. A. Collinson, Adazu, K., White, M.J., Findley, S.E. Aldershot, UK, Ashgate.
 Adger, W. N. (2006). "Vulnerability." <u>Global Environmental Change</u> 16: 268-281.
- Alam, N. and P. K. Streatfield (2009). Parent's Migration and Children's Education in Matlab, Bangladesh. <u>The Dynamics</u> <u>of Migration, Health and Livelihoods: INDEPTH Network perspectives</u>. M. A. Collinson, Adazu, K., White, M.J., Findley, S.E. Aldershot, UK, Ashgate.
- Clark, S. J., M. A. Collinson, K. Kahn and S. M. Tollman (2007). "Returning Home to Die: Circular labour migration and mortality in rural South Africa." <u>Scandinavian Journal of Public Health</u> **35**(Suppl. 69): 35-44.
- Collinson, M. A. (2009). Age Sex Profiles of Migration: Who is a Migrant? <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH Network perspectives</u> M. A. Collinson, .K. Adazu, M.J. White, S.E. Findley. Aldershot, UK, Ashgate.
- Collinson, M. A., A. A. M. Gerritsen, S. J. Clark, K. Kahn and S. M. Tollman (2009). Migration and Socio-Economic change in rural South Africa, 2000–2007. <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH Network</u> <u>perspectives</u> M. A. Collinson, .K. Adazu, M.J. White, S.E. Findley. Aldershot, UK, Ashgate.
- Findley, S. E. (2009). Dynamics of Space and Time: Community context of Migration, Livelihoods and Health in the INDEPTH Sites <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH Network perspectives M. A.</u> Collinson, Adazu, K., White, M.J., Findley, S.E. Aldershot, UK, Ashgate.
- Konseiga, A., E. Zulu, P. Bocquier, K. Muindi, D. Beguy and Y. Yé (2009). Assessing the effect of Mother's Migration on childhood mortality in the informal settlements of Nairobi. <u>The Dynamics of Migration, Health and Livelihoods</u>: <u>INDEPTH Network perspectives</u> M. A. Collinson, .K. Adazu, M.J. White, S.E. Findley. Aldershot, UK, Ashgate.
- Mbacké, C. (2009). The Relevance of the Volume. <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH Network</u> <u>perspectives</u> M. A. Collinson, .K. Adazu, M.J. White, S.E. Findley. Aldershot, UK, Ashgate.
- Nhacolo, A., D. Nhalungo, C. Sacoor, L. Matsinhe, J. Aponte and P. Alonso (2009). Migration and adult mortality in rural Southern Mozambique: Evidence from the demographic surveillance system in Manhiça district. . <u>The Dynamics</u> <u>of Migration, Health and Livelihoods: INDEPTH Network perspectives M. A. Collinson, .K. Adazu, M.J. White, S.E.</u> Findley. Aldershot, UK, Ashgate.
- Phuc, H. D., N. X. Thanh and N. T. K. Chuc (2009). Migration and Under 5 Morbidity in Bavi, Vietnam <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH Network perspectives</u> M. A. Collinson, .K. Adazu, M.J. White, S.E. Findley. Aldershot, UK, Ashgate.
- Punpuing, S. and P. Guest (2009). Migration and Agricultural Production in Kanchanaburi, Thailand <u>The Dynamics of Migration, Health and Livelihoods: INDEPTH Network perspectives</u> M. A. Collinson, .K. Adazu, M.J. White, S.E. Findley. Aldershot, UK, Ashgate.
- Rakodi, C. (2002). A livelihoods approach conceptual issues and definitions. <u>Urban Livelihooods: A people-centred</u> <u>approach to reducing poverty</u>. C. Rakodi and T. Lloyd-Jones. Sterling VA, Earthscan.
- Stark O and S. Yitzhaki (1988). "Labor Migration as a Response to Relative Deprivation." <u>Journal of Population Economics</u> 1(1): 57-70.

- Taylor, J. (1999). "The New Economics of Labour Migration and the role of remittances in the migration process." International Migration **37**(1): 63-86.
- White, M. J. (2009). Migration and Demographic Surveillance: An overview of Opportunities and Challenges. <u>The</u>
 <u>Dynamics of Migration, Health and Livelihoods: INDEPTH Network perpectives</u>. M. A. Collinson, .K. Adazu, M.J.
 White, S.E. Findley. Aldershot, Ashgate.